

'Save the Scraps' Lesson Plan



Suggested Syllabus Outcomes

GE2-2 describes the ways people, places and environments interact

GE3-2 explains interactions and connections between people, places and environments

Sustainability in Schools Organising Idea: 7

Suggested NSW Syllabus Content

- develop a design solution for an identified need or opportunity, using a variety of tools and materials that considers factors such as sustainability and time (ACTDEK010)
- discussion of ways waste can be managed sustainably (ACHASSK090)
- identification of ways people influence places and contribute to sustainability eg roads and services, building development applications, local sustainability initiatives (ACHASSK112)

Goal

Read 'Save the Scraps' by Bethany Stahl and learn about the process of composting food and garden scraps to reduce the amount of rubbish that goes into landfill.

Resources

- 'Save the Scraps' by Bethany Stahl
 - [Watch on YouTube](#)
 - [Buy on Amazon \(Amazon Affiliate Link\)](#)
 - [Visit Bethany Stahl's website](#)

Background information

Composting is a natural biological process where organic material such as food waste and fallen leaves and twigs are broken down into soil. Various microorganisms such as fungi, insects and bacteria help to decompose the material into a dark brown, crumbly material that is very high in nutrients. As these beneficial microorganisms decompose organic waste they produce heat. In fact, a compost pile can heat up to temperatures in the range of 50-65 °C.

There are a few key pieces of equipment and ingredients to make compost from your food scraps. In order to get started, you will need a compost bin that will keep heat in and keep the animals out. The compost bin should be placed in a location that is sunny and well-drained. You will then need to place fresh organic material (e.g. grass clippings, food scraps and garden waste) in your compost bin with dried garden waste (e.g. dried leaves and twigs) and water (enough to keep the compost pile moist, but not wet). In order to ensure that the compost is developing properly, it may be necessary to turn the compost every few days to provide the bacteria and microorganisms with enough air to survive.

After 3 to 12 months, the organic material will be fully broken down into a nutrient rich soil. The soil can be spread over the garden and lawn to provide nutrients to all of the plants and grass. As a result, the plants and grass will grow healthier and stronger which will lead to them providing better food and homes for insects, birds and other animals that may live and feed within them. Additionally, by composting food scraps at home, it will reduce our impact on the Earth by reducing the amount of waste going into landfill where it will release carbon dioxide and other greenhouse gases.

Activities

1. Read or watch “Save the Scraps” by Bethany Stahl
2. Discuss the process of composting and the benefits of doing so
3. Answer the questions about “Save the Scraps” below

Literal Questions

1. What food did Alex and Mateo eat?
Suggested answer: Alex and Mateo ate a healthy snack of apples and grapes.
2. Where did Alex and Mateo put their food scraps?
Suggested answer: Alex and Mateo put their food scraps in the compost bin in the garden.
3. Who helped turn the scraps into dirt for the plants?
Suggested answer: Mr Squiggles and the other worms help turn the food scraps into dirt for the plans.

The WildLife Movement

4. What are the benefits of composting your scraps?

Suggested answer: Composting makes nutritious soil to keep the gardens healthy and there is less waste going into the rubbish.

5. What kind of things can be composted?

Suggested answer: Good things to compost include fruit and veggie scraps, eggshells, grass, twigs, leaves and newspaper.

Inferential Questions

6. How did Mateo know that composting makes a difference?

Suggested answer: Alex saw that the marigold flower that was given compost was bigger and more beautiful than the flowers that didn't get compost.

7. How does composting help pollinators like bees and butterflies?

Suggested answer: The soil from composting helps to grow healthy plants that produce food for pollinators like bees and butterflies.

Applied Questions

8. Why can't the plastic or rubber ball be composted?

Suggested answer: Plastic and the rubber ball cannot be eaten by the worms that help with the composting and it can't be broken down. / Plastic and rubber are not biodegradable.

Extension Activities

* Note: These extension activities can help differentiate the lesson or provide students with additional activities to complete to lengthen this unit.

1. Calculate the amount of compostable waste your class makes in a day or week. Draw a chart comparing your compostable waste to recyclable waste and non-recyclable waste.
2. Research how to make a compost bin and make a list of the materials you need. Using your list, build a compost bin for all of the scraps from your school or home.
3. Research and write the procedure for adding material to your compost bin.